## INTERNATIONAL SEARCH REPORT

International application No. PCT/FI 2004/000531

#### A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H010 1/24, H010 1/38, H010 9/04
According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

#### IPC7: H01Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

### SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

#### EPO-INTERNAL, WPI DATA, PAJ, INSPEC

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

X Further documents are listed in the continuation of Box C.

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	PATENT ABSTRACTS OF JAPAN vol.1997, no. 10 31 August 1999 (1999-08-31) & JP11127010 A (SUGANO TAKAKI), 11 May 1999 (1999-05-11) abstract, figure 9	1,4-6
A	US 5936583 A (SEKINE ET AL), 10 August 1999 (10.08.1999), column 13, line 30 - line 54; column 14, line 23 - line 38, figures 19,22	1,4-6
A	US 4800392 A (GARAY ET AL), 24 January 1989 (24.01.1989), see the whole document	1,4-6

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*	Special categories of cited documents:	"T"	later document published after the international filing date or priority		
"A" document defining the general state of the art which is not considered to be of particular relevance			date and not in conflict with the application but cited to understand the principle or theory underlying the invention		
"E"	filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive		
"L"			step when the document is taken alone		
			document of particular relevance: the claimed invention cannot be		
"O"	document referring to an oral disclosure, use, exhibition or other means		considered to involve an inventive step when the document is combined with one or more other such documents, such combinate height of the order of the control of the order of the other such documents.		
"P"	document published prior to the international filing date but later than	<b>"&amp;</b> "	being obvious to a person skilled in the art		
	the priority date claimed	<u> </u>	document rnember of the same patent family		
Date	e of the actual completion of the international search	Date	of mailing of the international search report		
14 December 2004			11 5 -12- 2004		
- '	accompci Loot				
Name and mailing address of the ISA/			Authorized officer		
Swedish Patent Office					
Box 5055, S-102 42 STOCKHOLM		BO GUSTAVS SON/BS			
Facsimile No. +46 8 666 02 86			Telephone No. + 46 8 782 25 00		
Form	PCT/ISA/210 (second sheet) (Innuary 2004)	1 010p	1010110 10 0 702 20 30		

χ See patent family annex.

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	ation). DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Category*		
P,A	EP 1439603 A1 (FILTRONIC LK OY), 21 July 2004 (21.07.2004), see the whole document	1,4-6
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# INTERNATIONAL SEARCH REPORT Information on patent family members

27/11/2004

International application No. PCT/FI 2004/000531

US	5936583	A	10/08/1999	DE EP JP JP JP	69315939 D,T 0590671 A,B 3457351 B 6169217 A 2002305407 A 2002320017 A	20/05/1998 06/04/1994 14/10/2003 14/06/1994 18/10/2002 31/10/2002
 US	4800392	A	24/01/1989	NON	E	
EP	1439603	A1	21/07/2004	EP EP FI FI FI FI US US US FI	1439601 A 1439602 A 1439604 A 113586 B 113587 B 20030059 D,V 20030193 A 20030193 A 20030567 A 20040140934 A 20040140935 A 20040145527 A 20040147297 A 5918 U	21/07/2004 21/07/2004 21/07/2004 00/00/0000 00/00/0000 17/02/2003 00/00/0000 16/07/2004 16/07/2004 22/07/2004 22/07/2004 29/07/2004 29/07/2004 29/07/2004 27/08/2003